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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/709,653	05/20/2004	Joseph Tucker	78.1182	3652
26932	7590	03/06/2006	EXAMINER	
JEFFREY E. DALY GRANT PRIDECO, L.P. 400 N. SAM HOUSTON PARKWAY EAST SUITE 900 HOUSTON, TX 77060			GAY, JENNIFER HAWKINS	
			ART UNIT	PAPER NUMBER
			3672	
DATE MAILED: 03/06/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/709,653	<b>Applicant(s)</b> TUCKER ET AL.	
	<b>Examiner</b> Jennifer H. Gay	<b>Art Unit</b> 3672	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23,25-34 and 36-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23,25-34 and 36-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 4, 8, 12, 23, 29, 33, 34, 40, and 44 are rejected under 35 U.S.C. 102(b) as being anticipated by Claesson et al. (US 2002/0000336).

*Regarding claims 1, 23, 34:* Rowlett discloses a rolling cutter insert, comprising: a generally cylindrical body **50**, a cutting surface **60**, and a bottom surface (not labeled, very bottom surface of the bit); a tapered surface adjacent **48** said generally cylindrical body; and a cylindrical section (the lowermost section of the bit, not labeled) positioned between said bottom surface and said tapered surface.

*Regarding claims 4, 29, 40:* The generally cylindrical body has a diameter that is greater than a diameter of said cylindrical section.

*Regarding claims 8, 33, 44:* The tapered surface appears to be formed at an angle of approximately 15 degrees relative to a longitudinal axis of said cylindrical body.

*Regarding claim 12:* The insert is used on a roller cone bit.

3. Claims 1-8, 13-17, 19-21, 23, 25-34, and 36-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Rowlett (US 5,314,029).

*Regarding claims 1, 13, 19, 23, 34:* Rowlett discloses a rolling cutter insert, comprising: a generally cylindrical body **50**, a cutting surface **60**, and a bottom surface (not labeled, very bottom surface of the bit); a tapered surface adjacent **48** said generally cylindrical body; and a cylindrical section (the lowermost section of the bit, not labeled) positioned between said bottom surface and said tapered surface.

*Regarding claims 2, 13, 20, 25, 26, 28, 36-39:* The insert includes a radiused corner region (not labeled) adjacent said bottom surface, said radiused corner region being positioned between said bottom surface and said cylindrical section.

*Regarding claims 3, 27:* The cylindrical section is adjacent said radiused corner region.

*Regarding claims 4, 14, 29, 40:* The generally cylindrical body has a diameter that is greater than a diameter of said cylindrical section.

*Regarding claims 5, 16, 19, 30, 41:* The insert includes a radiused region positioned 44 between said tapered surface and said cylindrical section.

*Regarding claims 6, 31, 42:* The radiused corner region of claim 2 defines a transition between said bottom surface and said cylindrical section.

*Regarding claims 7, 16, 32, 43:* The radiused region of claim 5 defines a transition between said cylindrical section and said tapered surface.

*Regarding claims 8, 17, 21, 33, 44:* The tapered surface appears to be formed at an angle of approximately 15 degrees relative to a longitudinal axis of said cylindrical body.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 9-12, 18, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rowlett.

*Regarding claims 9-11:* Rowlett discloses all of the limitations of the above claim(s) except for the radius of the radiused corner region and the length of the cylindrical section. However, it would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have formed the insert of Rowlett so that the radiused corners had a radius of approximately 0.020 inches and the cylindrical section ad a length of approximately 0.020 inches, since it has been held that

Art Unit: 3672

discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

*Regarding claims 12, 18, and 22:* Rowlett discloses all of the limitations of the above claim(s) except for the insert being used on a roller cone bit. However, it would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have used the insert of Rowlett on a roller cone bit in order to have provided a roller cone bit that shared the same cutting benefits as the bit of Rowlett.

### ***Response to Arguments***

6. Applicant's arguments with respect to claims 1-23, 25-34, and 36-44 are have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer H. Gay whose telephone number is (571) 272-7029. The examiner can normally be reached on Monday-Thursday, 6:30-4:00 and Friday, 6:30-1:00.

Art Unit: 3672

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on (571) 272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Jennifer H Gay  
Primary Examiner  
Art Unit 3672

JHG  
March 1, 2006